

REMARKS

In the office action, the specification was objected as the abstract being too long. The abstract has been shortened accordingly. Claim 1 was objected too. The word "code" in claim 1 was replaced with "codes" as suggested by the Examiner. In the office action, claims 1, 2, 4, 5, 7 and 8 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,339,612 (Stewart et al.); and claims 3 and 6 were rejected under 35 U.S.C. §103(a) as being unpatentable over Stewart et al. in view of U.S. Patent No. 6,078,607 (Monroe et al.). In the present invention, each midamble code in a received communication burst is detected. A mapping exists between the midamble codes and related channelization codes. Out of the related channelization codes, channelization codes of the received communication bursts are detected. This approach allows for an efficient technique for determining channelization codes based on a received midamble code. By using the mapping between the midamble codes and the channelization codes, either the channelization codes can be directly determined or the possible combinations channelization codes can be greatly reduced, speeding the channelization codes acquisition and accuracy. This further facilitates the use of less hardware processing by detecting fewer channelization codes.

Stewart et al. discloses extracting the midamble portion of a received burst and using that portion to perform a channel estimation. See Stewart, column 4

lines 51-55. The estimated channel impulse response is convolved with each known user signature sequence. See column 5, lines 1-4. Apparently, in the Stewart et al. system, the receiver already knows the user signature sequences. As shown in Figures 2 and 3, K users are sending uplink communications to a base station 200. The base station assigns or has knowledge of the users channelization and midamble codes. Accordingly, the base station has knowledge for all of these sequences. As a result, there is no reason that the base station in Stewart et al. would need to determine the channelization codes as recited in the pending claims. Furthermore, Stewart et al. clearly does not disclose a mapping between the midamble codes and related channelization codes or the use of that mapping in detecting the channelization codes of a received communication burst. Accordingly, the present invention is patentable over that reference. Monroe et al. also does not disclose any association between the midamble and channelization codes at all. It is merely cited for a threshold test being used in a code correlation.

Accordingly, Applicants respectfully submit that the claims are allowable.


Applicant: Zeira et al.
Application No.: 10/090,498

Reconsideration and entry of this amendment are respectfully requested.

Respectfully submitted,

Zeira et al.

By



Jeffrey M. Glabicki
Registration No. 42,584
(215) 568-6400

Volpe and Koenig, P.C.
United Plaza, Suite 1600
30 South 17th Street
Philadelphia, PA 19103

JMG/mak